

# 4GB Computer memory DDR4 for Gigabyte GA-X170-EXTREME ECC (rev. 1.0) UDIMM





# Your benefits ✓ verified quality memory ✓ 5 years warranty warranty details see last page ✓ 100% compatible ✓ free support on our hotline ✓ fast delivery

#### PHS-memory® - computer memory with 100% quality

- many years of IT competence
- Free support for optimal configuration and product selection
- High availability through professional warehouse management
- Fast delivery in throughout Europe
- Short response times and professional order processing due to full digitalization throughout the entire process with complete traceability
- Incoming goods inspection include checks of the DRAMs, PCBs and the programmed SPDs in order to exclude possible errors (Controlled BOM).
- PHS-memory® brand memories guarantee 100% compatibility to the specified system.
- PHS-memory® memories can be used together with existing memories in the device depends on to the configuration rules of the system.
- The "fallback option" in the SPD of PHS-memory® allows DRAMs with higher clock rates to be operated together with older memory modules with lower clock rates within the system.
- Products with unique serial number for service and warranty
- Pre-sales and after-sales support by technically trained personnel



# Memory Specification



Memory size	4GB		
Memory technology	DDR4		
ECC support	no		
JEDEC Norm	PC4-17000U		
ype UDIMM (Non-ECC unbuffered)			
umber of pins 288 Pin DIMM			
Memory data transfer rate	2133MHz @ CL15		
Voltage	1,2 Volt		
Speciality	-		
Board dimensions	133,35 x 31,25 (LxB mm)		
Operating temperature	0° C - 85° C		
Storage temperature	-40° C - +95° C		
RoHS compliant	Yes		
SKU	SP213581		
EAN	4055069816921		

Note: The module specified in this datasheet is one of several possible configurations available under this part number.

Some details may differ from the specifications described here and the illustration, but have no negative influence on the functionality.



#### System Specifications

The memory is 100% compatible with this sytem:

System manufacturer	Gigabyte		
Device type	Motherboard-memory		
Device family	Mainboard GA-X		
Device series	GA-X17 Serie		
Device name	GA-X170-EXTREME ECC (rev. 1.0)		
Maximum memory*	128GB		
Number of memory sockets	4		

<sup>\*</sup> The specifications for the maximum memory upgrade may differ from those of the manufacturer Gigabyte. Often the information given in the manual for the maximum memory upgrade is not up to date. New memory technologies, bios updates or newer software versions often allow the use of memory modules with a higher capacity than specified by the manufacturer with the same performance and stability.

## Information on memory allocation

#### Information on memory configuration

The following technical specifications should be considered in advance:

- A higher memory clock of the memory module automatically adapts to the memory clock specified by the system. This can be the case especially with larger capacities.
- Im Gerät können non ECC or ECC (Error-Correction-Code) RAM-memory installiert werden. Memory with der Description ECC besitzen eine Fehlerkorrektur.
- Non ECC memory modules cannot be used together with ECC memories.
- If a memory expansion is to be made with the already existing RAM memories, it must be checked which memory technology (non ECC / ECC) is already existing in the system.
- If memory modules are provided with higher speeds than specified by the system, the memory speed is automatically adjusted to the system specifications.

#### Information on memory installation

- Turn off the system
- Remove the plug of the power supply unit (if connected)
- Remove the battery, according to the user manual of the system
- Always ground yourself before touching electronic components
- Protect the memory module from static voltages:
  - Do not touch the gold pins of the memory module
  - Only touch the sides of the memory module
  - Use a grounding strap and/or ESD glove if possible

General installation instructions are supplied by E-Mail.



## Further memory options for Gigabyte GA-X170-EXTREME ECC (rev. 1.0)

Size	SKU	Technology	Туре	Number of pins	Brand	Reference no.
4GB	SP213581	DDR4	UDIMM (Non- ECC unbuffered)	288 Pin DIMM	PHS-memory®	
8GB	SP213582	DDR4	UDIMM (Non- ECC unbuffered)	288 Pin DIMM	PHS-memory®	
8GB	SP213579	DDR4	UDIMM ECC (ECC unbuffered)	288 Pin DIMM	PHS-memory®	
16GB	SP213580	DDR4	UDIMM (Non- ECC unbuffered)	288 Pin DIMM	PHS-memory®	
16GB	SP213578	DDR4	UDIMM ECC (ECC unbuffered)	288 Pin DIMM	PHS-memory®	
32GB	SP420401	DDR4	UDIMM ECC (ECC unbuffered)	288 Pin DIMM	PHS-memory®	
32GB	SP305735	DDR4	UDIMM (Non- ECC unbuffered)	288 Pin DIMM	PHS-memory®	

#### PHS-memory® warranty

Every PHS-memory® is equipped with a 5-years-warranty of perfect operation. If the RAM module is defective or fails within 5 years of purchase when used properly, you will receive an appropriate RAM module free of charge. If a suitable memory module is no longer available, we will refund the purchase price.





#### Contact Information

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#### Product Datasheet | SP213581 4GB Computer memory for GA-X170-EXTREME ECC (rev. 1.0)



All information without guarantee. Technical changes and errors excepted. You can find current price information in our online shop at https://www.phs-memory.com